

## Why replace the Seawall?

The original Seawall was built in phases from 1915 to 1936, and holds the soil in place along Seattle's waterfront. The Seawall also supports the Alaskan Way surface street and many utilities in place. Investigations after the 2001 Nisqually earthquake have shown that the Seawall's condition is poor and needs to be replaced. The Seawall continues to deteriorate despite regular maintenance by the City of Seattle. In addition, marine organisms called gribbles and toredos have been eating away at the timbers that support the Seawall.

While the tunnel's western wall will replace much of the seawall, a new Seawall will be built from Pine Street to Broad Street.

*The Seawall replacement north of Pine Street includes the following steps:*

1. Excavate the platform and mix concrete with soil
2. Remove the old Seawall face panel
3. Install a slab and wall along the shoreline
4. Backfill as needed

## Project Schedule



- 2001** Nisqually Earthquake shook Puget Sound Viaduct and seawall replacement began
- 2002** Conceptual engineering of replacement began
- 2003** Alternatives for environmental review selected
- 2004** Draft EIS released  
Tunnel selected as preferred alternative
- 2005** Construction phasing approach development begins  
Concept development north of the Battery Street Tunnel Design begins
- 2006** Supplemental draft EIS released  
Preferred construction phasing approach announced
- 2007** Final EIS release  
Initial utility work begins
- 2009** SR 99 construction begins

## Your Role

Everyone will be affected by construction, but your insight can help make construction better. We need your ideas on how we can make it through the expected lane closures, noise and vibrations, and disruptions to businesses and residents. Our priorities during construction are:

- Keep the public and construction workers safe
- Keep people and goods moving in, through, and out of downtown, and
- Manage the impacts on residents and businesses.

## Tell us how by:

- Attending a public meeting
- Visit [www.wsdot.wa.gov/projects/viaduct](http://www.wsdot.wa.gov/projects/viaduct) and send us a comment
- Leave a message on the project information line at 206-269-4421

## Alaskan Way Viaduct and Seawall Replacement Project



## Constructing a Future for All...

In 1889, excess soil from the Denny Regrade was dumped into the tidelands of Elliott Bay to create part of what is now Alaskan Way. Now it is time to remove some of that fill to make way for the tunnel that will replace the seismically damaged and aging Alaskan Way Viaduct and Seawall.

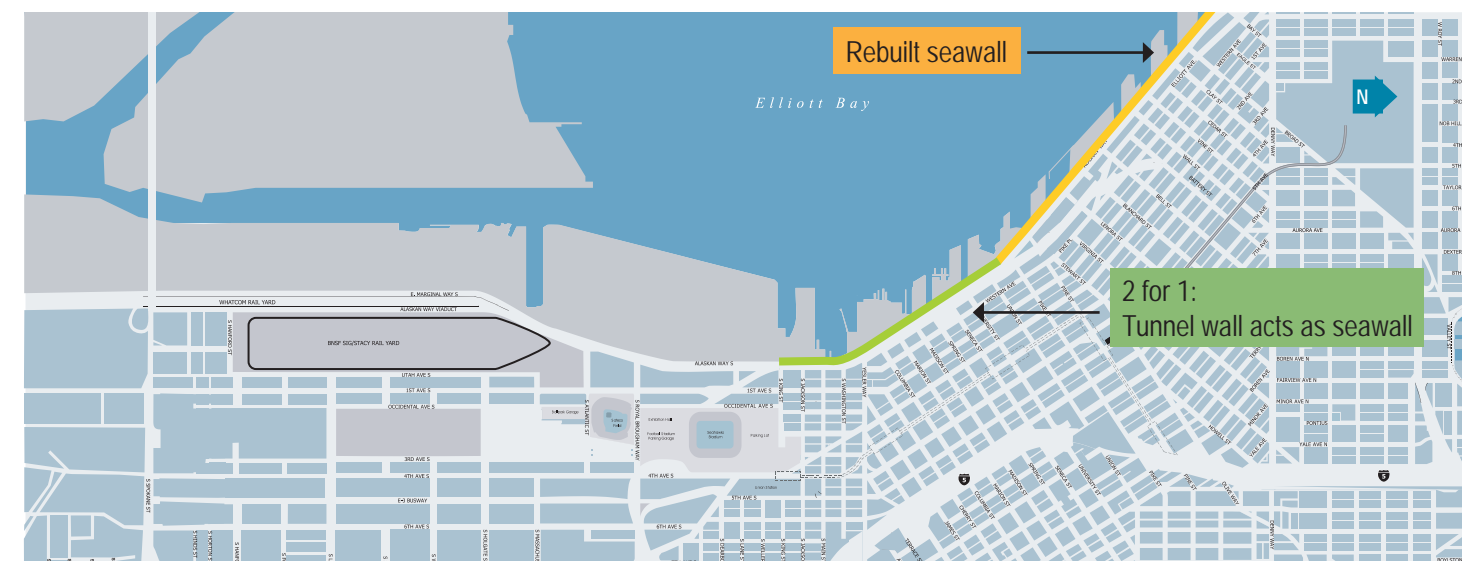
## Building a Safer Highway

The Viaduct has settled four inches at one location since the Nisqually earthquake in 2001 and the Seawall continues to be eaten away by gribbles and toredos. There is no question that construction in the heart of downtown Seattle will lead to challenges. But it will be worth it. If the

Viaduct was not replaced, economic loss caused by congestion alone would be enough to pay for the replacement within 20 years.

That's why construction will take creativity from contractors and patience from the

public. The amount of space we have for maneuvering equipment, supporting businesses that survive on walk-by traffic, and keeping people and goods moving are factors that will shape the speed and methods of construction.

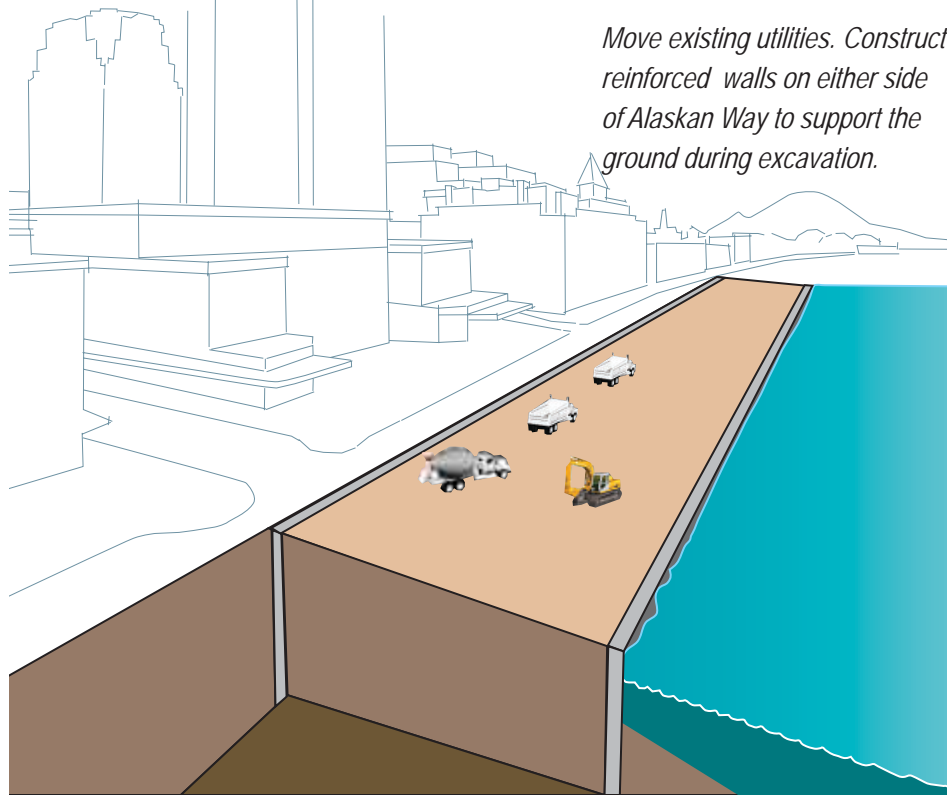


A tunnel and rebuilt seawall along Seattle's Waterfront

## How The Tunnel Will Be Built

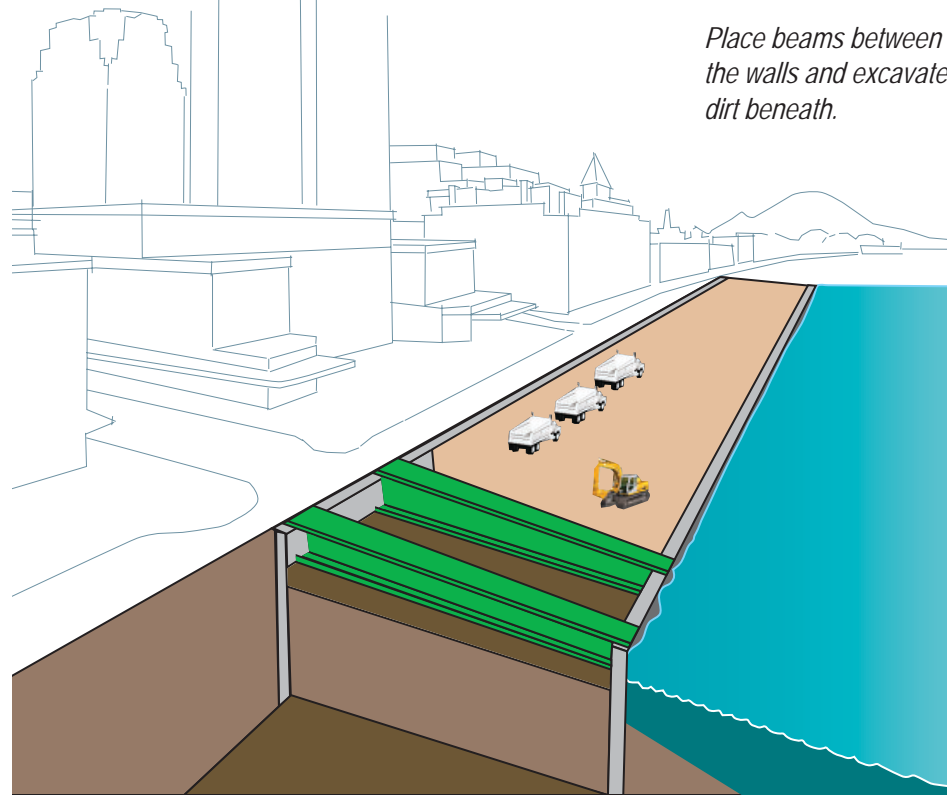
1

*Move existing utilities. Construct reinforced walls on either side of Alaskan Way to support the ground during excavation.*



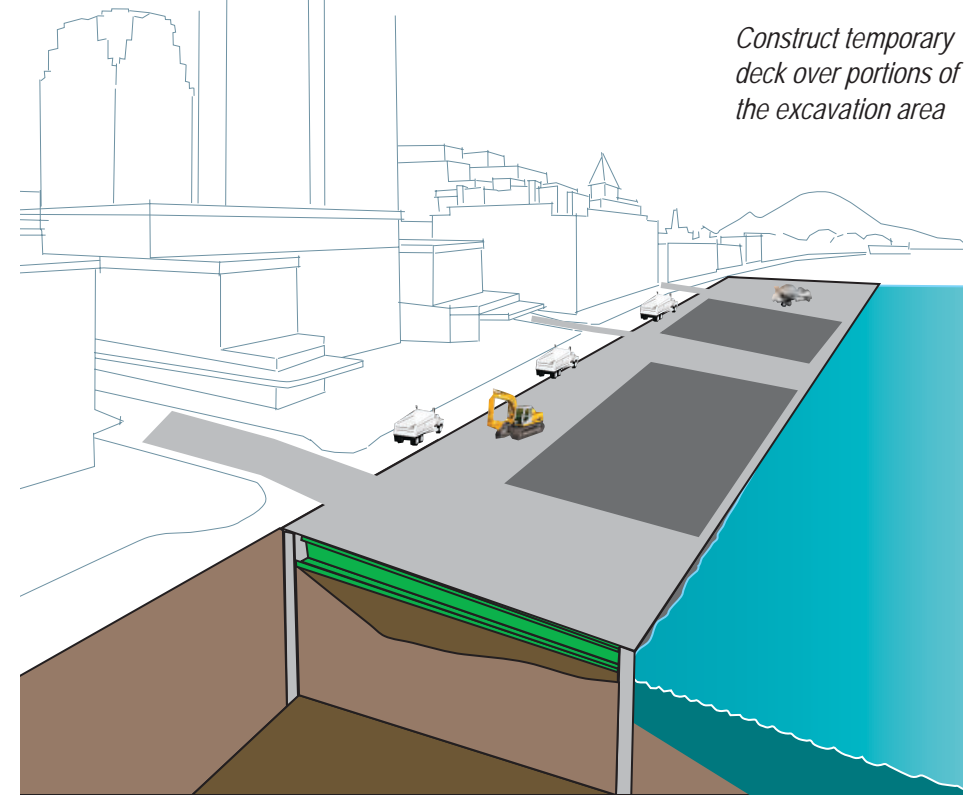
2

*Place beams between the walls and excavate dirt beneath.*



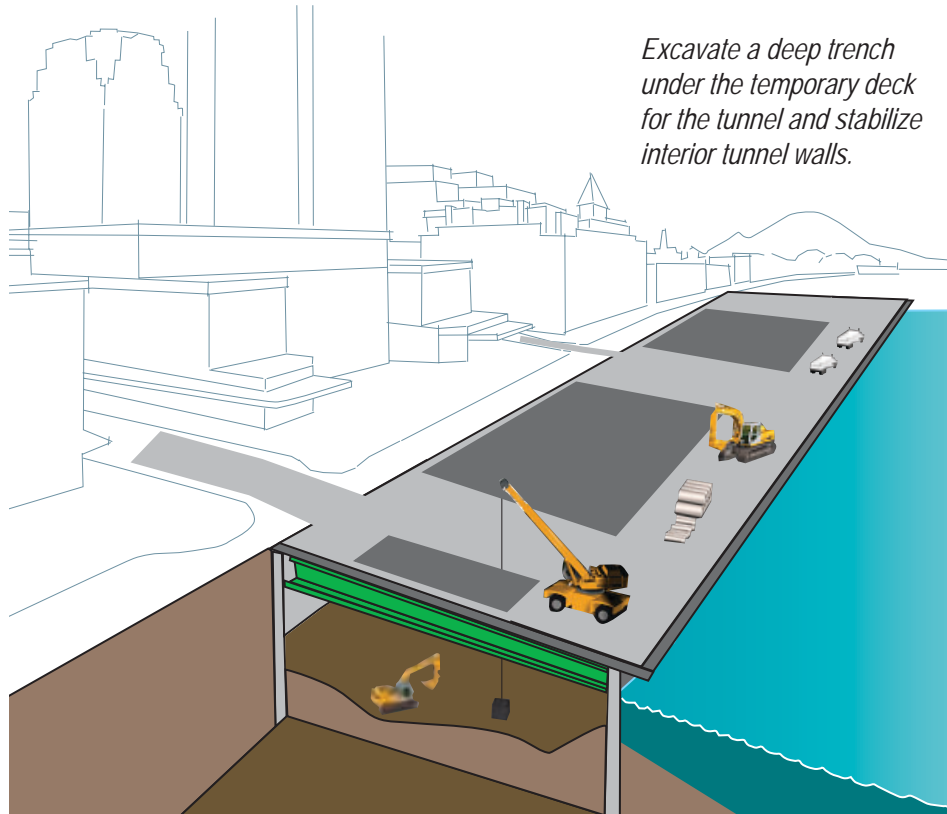
3

*Construct temporary deck over portions of the excavation area.*



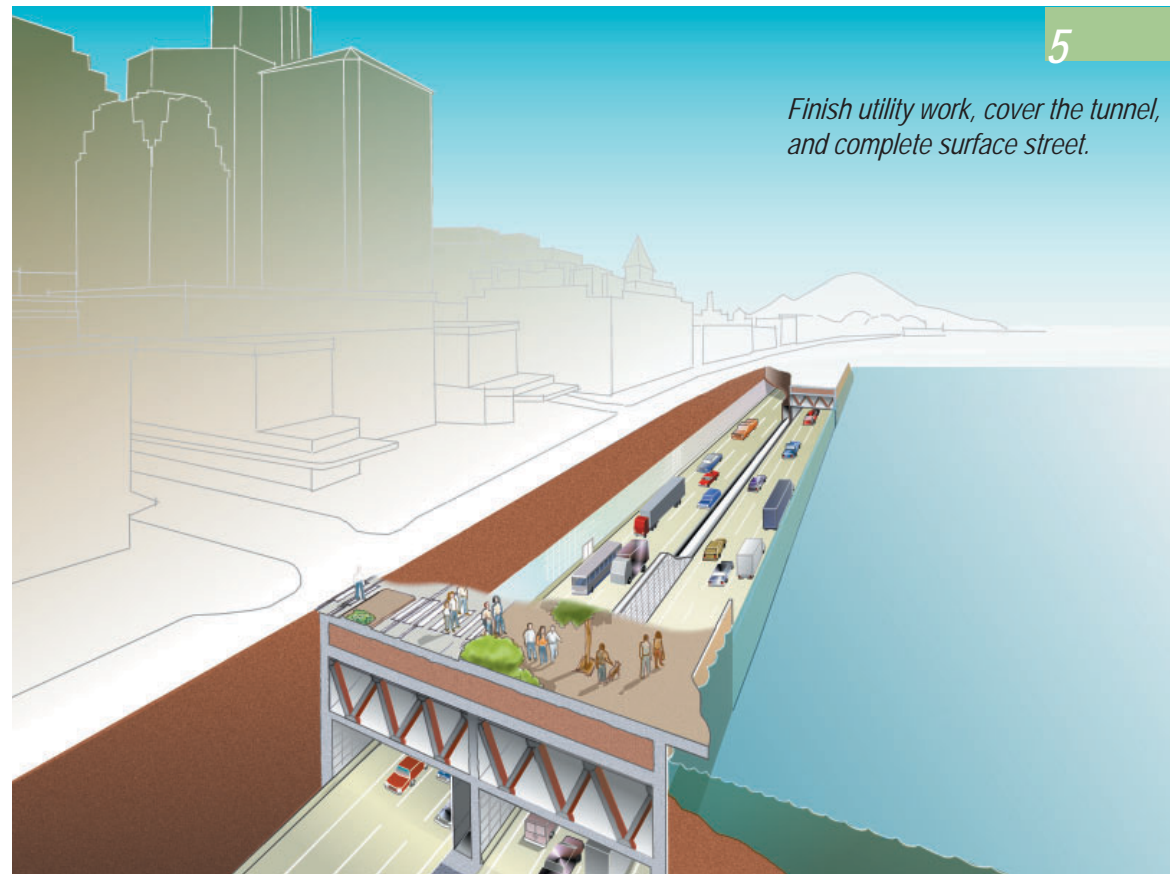
4

*Excavate a deep trench under the temporary deck for the tunnel and stabilize interior tunnel walls.*



5

*Finish utility work, cover the tunnel, and complete surface street.*



## Why a Cut-and-Cover Tunnel?

After considering different types of tunnels, the lead agencies decided that a cut-and-cover tunnel was the best choice because it is less expensive than other types of tunnels. Constructing a cut-and-cover tunnel is a well-tested process and has been done here in the Puget Sound region and all over the world thousands of times. In fact, the Battery Street Tunnel and I-90 tunnel on Mercer Island are both cut-and-cover tunnels.

## What is a Cut-and-Cover Tunnel?

A cut-and-cover tunnel is formed by excavating a trench. After initial excavation and placement of beams, portions of the area are temporarily decked as excavation continues below. This type of construction method is normally used where the tunnel is built close to the surface.